What is claimed is:

[Claim 1] A generic protocol translator that translates information from a source device to a destination device, comprising:

a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;
one or more receivers that receive information from said receiver circuit manager;
one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications;
a message router that determines which destination protocol is appropriate for the information; and
one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 2] A system with a generic protocol translator that translates information from a source device to a destination device, comprising:

a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;
one or more receivers that receive information from said receiver circuit manager;
one or more message converters that convert the information to the destination format that uses a conversion process, said message converters

are extensible and can be reprogrammed in the field to support other protocols, device types, and applications;
a message router that determines which destination protocol is appropriate for the information; and
one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 3] A method to make generic protocol translator that translates information from a source device to a destination device, comprising:

providing a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;
providing one or more receivers that receive information from said receiver circuit manager;
providing one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications;
providing a message router that determines which destination protocol is appropriate for the information; and
providing one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 4] A method that translates information from a source device to a destination device using a generic protocol translator, comprising:

receiving information with a receiver circuit manager from a source device where the information is intended for a destination device, said receiver circuit manager further comprises one or more interface sockets, each interface socket is assigned a supported source protocol,

receiving information with one or more receivers that receive information from said receiver circuit manager;
converting information with one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications;
routing information with a message router that determines which destination protocol is appropriate for the information; and
sending information with one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 5] A program storage device readable by a computer that tangibly embodies a program of instructions executable by the computer to perform a method that translates information from a source device to a destination device using a generic protocol translator, comprising:

receiving information with a receiver circuit manager from a source device where the information is intended for a destination device, said receiver circuit manager further comprises one or more interface sockets, each interface socket is assigned a supported source protocol,
receiving information with one or more receivers that receive information from said receiver circuit manager;
converting information with one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications;
routing information with a message router that determines which destination protocol is appropriate for the information; and
sending information with one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 6] A dependent claim according to claims 1, 2, 3, 4, or 5 wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage.

[Claim 7] A generic protocol translator that translates information from a source device to a destination device, comprising:

a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;
one or more receivers that receive information from said receiver circuit manager;
one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications, wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage;
a message router that determines which destination protocol is appropriate for the information; and
one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 8] A system with a generic protocol translator that translates information from a source device to a destination device, comprising:

a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;
one or more receivers that receive information from said receiver circuit manager;
one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications, wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage;
a message router that determines which destination protocol is appropriate for the information; and
one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 9] A method to make generic protocol translator that translates information from a source device to a destination device, comprising:

providing a receiver circuit manager that further comprises one or more interface sockets, each interface socket is assigned a supported source protocol, said receiver circuit manager receives information from a source device that is intended for a destination device through said interface sockets;

providing one or more receivers that receive information from said receiver circuit manager;
providing one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications, wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage;
providing a message router that determines which destination protocol is appropriate for the information; and
providing one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 10] A method that translates information from a source device to a destination device using a generic protocol translator, comprising:

receiving information with a receiver circuit manager from a source device where the information is intended for a destination device, said receiver circuit manager further comprises one or more interface sockets, each interface socket is assigned a supported source protocol,
receiving information with one or more receivers that receive information from said receiver circuit manager;
converting information with one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications, wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of

subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage;
routing information with a message router that determines which destination protocol is appropriate for the information; and
sending information with one or more message senders that transfer the information in the destination format and protocol to the destination device.

[Claim 11] A program storage device readable by a computer that tangibly embodies a program of instructions executable by the computer to perform a method that translates information from a source device to a destination device using a generic protocol translator, comprising:

receiving information with a receiver circuit manager from a source device where the information is intended for a destination device, said receiver circuit manager further comprises one or more interface sockets, each interface socket is assigned a supported source protocol,
receiving information with one or more receivers that receive information from said receiver circuit manager;
converting information with one or more message converters that convert the information to the destination format that uses a conversion process, said message converters are extensible and can be reprogrammed in the field to support other protocols, device types, and applications, wherein said conversion process uses a poly dimensional finite state automaton that further comprises a multi-stage pipeline comprising a first stage and a plurality of subsequent stages, wherein each stage of said multi-stage pipeline further comprises a matrix wherein a result is obtained as a function of one or more input variables, wherein one of said input variables of each said subsequent stage further comprises the result from a prior stage;
routing information with a message router that determines which destination protocol is appropriate for the information; and

sending information with one or more message senders that transfer the information in the destination format and protocol to the destination device.